```
    4 <110> APPLICANT: Allen, Keith D.
    6 <120> TITLE OF INVENTION: TRANSGENIC MICE CONTAINING INWARDLY
    7        RECTIFYING POTASSIUM CHANNEL (Kir5.1) GENE DISRUPTIONS
   10 <130> FILE REFERENCE: R-902
C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/005,202
C--> 12 <141> CURRENT FILING DATE: 2001-12-04
   12 <150> PRIOR APPLICATION NUMBER: 60/254,888
   13 <151> PRIOR FILING DATE: 2000-12-11
   15 <160> NUMBER OF SEQ ID NOS: 4
   17 <170> SOFTWARE: FastSEQ for Windows Version 4.0
   19 <210> SEQ ID NO: 1
   20 <211> LENGTH: 1257
   21 <212> TYPE: DNA
   22 <213> ORGANISM: Mus musculus
   24 <400> SEQUENCE: 1
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   27 ggcagctgta atgtgtactt taaacacatt tttggagaat ggggggagcta catggttgat  180
   28 attttacca ctcttgtgga taccaagtgg cgccatatgt tcatatatt ttctctgtct  240
   29 tacattctct cctggttcat atttggttcc atatttggc tcatagcctt tcatcacgga  300
   30 gacctattaa gcgatccaga tatcacccct tgtgttgaca acgtgcattc atttacggct  360
   31 gcatttttat tctccctgga gacccagacc accattggat acggttaccg ctgtgtcacc  420
   32 gaagagtgct ctgtggctgt actgacagtg atccttcagt ccatcctcag ctgcatcata  480
   33 aacacctttca tcattggagc agccttggca aagatggcaa ctgcccggaa gagagcccag  540
   34 accatacgct tcagctattt tgccctcatt ggtatgagag acgggaagcc ttgcctcatg  600
   35 tggcgcatag gtgacttccg accaaaccat gtggtagagg gcacggtgag agcccaactt  660
   36 ctgcgctatt cagaagacag tgaagggagg atgacgatgg cgtttaaaga cctcaaactc  720
   37 gtcaatgacc agatataatcct ggtaactcca gtgactattg tccatgaaat tgaccatgag  780
   38 agccctctgt atgcccttga ccgcaaggca gtggccaaag ataatttcga gattctggtg  840
   39 acatttattt atactggtga ttccactggg acatcccacc agtccagaag ttcctacatc  900
   40 cccagagaaa ttctctgggg ccacaggttt catgatgtat tggaagtgaa gagaaagtac  960
   41 tacaaggtga actgcttgca gtttgaagga agcggtgaag tctacgcccc cttttgcagt  1020
   42 gccaaacaac tggactggaa ggaccaacaa ctcaacaact tggagaaaac gtcccctgcc  1080
   43 cgaggatcct gcaattctga caccaacacc agaggacggt ccttcagcgc agttgccgtg  1140
   44 gtgagcagct gtgagaaccc agaggagacc gtcctgtccc cacaagatga atgtaaggag  1200
   45 atgccctatc agaaagccct cctgacttta aataggatct ccatggaatc ccagatg  1257
   47 <210> SEQ ID NO: 2
   48 <211> LENGTH: 419
   49 <212> TYPE: PRT
   50 <213> ORGANISM: Mus musculus
   52 <400> SEQUENCE: 2
   53 Met Ser Tyr Tyr Gly Ser Ser Tyr Arg Ile Val Asn Val Asp Ser Lys
   54  1               5                   10                  15
   55 Tyr Pro Gly Tyr Pro Pro Glu His Ala Ile Ala Glu Lys Arg Arg Ala
   56              20                  25                  30
   57 Arg Arg Arg Leu Leu His Lys Asp Gly Ser Cys Asn Val Tyr Phe Lys
   58          35                  40                  45
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 59 His Ile Phe Gly Glu Trp Gly Ser Tyr Met Val Asp Ile Phe Thr Thr
 60         50                  55                  60
 61 Leu Val Asp Thr Lys Trp Arg His Met Phe Ile Ile Phe Ser Leu Ser
 62 65                  70                  75                  80
 63 Tyr Ile Leu Ser Trp Leu Ile Phe Gly Ser Ile Phe Trp Leu Ile Ala
 64                 85                  90                  95
 65 Phe His His Gly Asp Leu Leu Ser Asp Pro Asp Ile Thr Pro Cys Val
 66             100                 105                 110
 67 Asp Asn Val His Ser Phe Thr Ala Ala Phe Leu Phe Ser Leu Glu Thr
 68             115                 120                 125
 69 Gln Thr Thr Ile Gly Tyr Gly Tyr Arg Cys Val Thr Glu Glu Cys Ser
 70         130                 135                 140
 71 Val Ala Val Leu Thr Val Ile Leu Gln Ser Ile Leu Ser Cys Ile Ile
 72 145                 150                 155                 160
 73 Asn Thr Phe Ile Ile Gly Ala Ala Leu Ala Lys Met Ala Thr Ala Arg
 74                 165                 170                 175
 75 Lys Arg Ala Gln Thr Ile Arg Phe Ser Tyr Phe Ala Leu Ile Gly Met
 76             180                 185                 190
 77 Arg Asp Gly Lys Pro Cys Leu Met Trp Arg Ile Gly Asp Phe Arg Pro
 78             195                 200                 205
 79 Asn His Val Val Glu Gly Thr Val Arg Ala Gln Leu Leu Arg Tyr Ser
 80 210                 215                 220
 81 Glu Asp Ser Glu Gly Arg Met Thr Met Ala Phe Lys Asp Leu Lys Leu
 82 225                 230                 235                 240
 83 Val Asn Asp Gln Ile Ile Leu Val Thr Pro Val Thr Ile Val His Glu
 84                 245                 250                 255
 85 Ile Asp His Glu Ser Pro Leu Tyr Ala Leu Asp Arg Lys Ala Val Ala
 86             260                 265                 270
 87 Lys Asp Asn Phe Glu Ile Leu Val Thr Phe Ile Tyr Thr Gly Asp Ser
 88             275                 280                 285
 89 Thr Gly Thr Ser His Gln Ser Arg Ser Ser Tyr Ile Pro Arg Glu Ile
 90         290                 295                 300
 91 Leu Trp Gly His Arg Phe His Asp Val Leu Glu Val Lys Arg Lys Tyr
 92 305                 310                 315                 320
 93 Tyr Lys Val Asn Cys Leu Gln Phe Glu Gly Ser Val Glu Val Tyr Ala
 94             325                 330                 335
 95 Pro Phe Cys Ser Ala Lys Gln Leu Gln Trp Lys Asp Gln Gln Leu Asn
 96             340                 345                 350
 97 Asn Leu Glu Lys Thr Ser Pro Ala Arg Gly Ser Cys Asn Ser Asp Thr
 98             355                 360                 365
 99 Asn Thr Arg Arg Arg Ser Phe Ser Ala Val Ala Val Val Ser Ser Cys
100 370                 375                 380
101 Glu Asn Pro Glu Glu Thr Val Leu Ser Pro Gln Asp Glu Cys Lys Glu
102 385                 390                 395                 400
103 Met Pro Tyr Gln Lys Ala Leu Leu Thr Leu Asn Arg Ile Ser Met Glu
104             405                 410                 415
105 Ser Gln Met
109 <210> SEQ ID NO: 3
110 <211> LENGTH: 200
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RAW SEQUENCE LISTING   DATE: 01/02/2002
PATENT APPLICATION: US/10/005,202 TIME: 09:43:36

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF3\01022002\J005202.raw

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112 <213> ORGANISM: Artificial Sequence
114 <220> FEATURE:
115 <223> OTHER INFORMATION: Targeting vector
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119 gctgagaaga gaagagcaag aaggcgcttg ctccacaaag atggcagctg taatgtgtac 120
120 tttaaacaca tttttggaga atgggggagc tacatggttg atatttttac cactcttgtg 180
121 gataccaagt ggcgccatat                                              200
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124 <211> LENGTH: 200
125 <212> TYPE: DNA
126 <213> ORGANISM: Artificial Sequence
128 <220> FEATURE:
129 <223> OTHER INFORMATION: Targeting vector
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133 aaacaccttc atcattggag cagccttggc aaagatggca actgcccgga agagagccca 120
134 gaccatacgc ttcagctatt ttgccctcat tggtatgaga gacgggaagc tttgcctcat 180
135 gtggcgcata ggtgacttcc                                              200
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L:12 M:270 C: Current Application Number differs, Replaced Current Application No
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date